

Claims

- [c1] A hinge plate for integrally and pivotally connecting a first truss member to a second truss member comprising:
- a first connector comprising a planar member having at least one mounting portion thereon, the first connector having a hinge portion thereon;
 - a second connector comprising a planar member having at least one mounting portion thereon, the second connector having a hinge portion thereon;
 - an intermediate member comprising a planar member having at least one mounting portion thereon, the second connector having a hinge portion at a first end thereof and a hinge portion at a second end thereof opposite to the first end, wherein the hinge portion on the first connector is pivotally mounted to the hinge portion on the first end of the intermediate member and the hinge portion on the second connector is pivotally mounted to the hinge portion on the second end of the intermediate member;
- whereby a multifunctional pivotal mounting between truss members can be made by fastening the first connector to a first truss member and fastening the second connector to a second truss member.
- [c2] The hinge plate of claim 1 wherein the at least one mounting portion on the first connector comprises a nail plate.

- [c3] The hinge plate of claim 2 wherein the at least one mounting portion on the second connector comprises a nail plate.
- [c4] The hinge plate of claim 3 wherein the at least one mounting portion on the intermediate member comprises a nail plate.
- [c5] The hinge plate of claim 4 wherein the hinge portion on at least one of the first connector, second connector and the intermediate member comprises a roll-formed hinge portion.
- [c6] The hinge plate of claim 1 wherein the at least one mounting portion on the second connector comprises a nail plate.
- [c7] The hinge plate of claim 1 wherein the at least one mounting portion on the intermediate member comprises a nail plate.
- [c8] The hinge plate of claim 1 wherein the hinge portion on at least one of the first connector, second connector and the intermediate member comprises a roll-formed hinge portion.
- [c9] A connector subassembly for integrally and pivotally connecting a first truss member to a second truss member comprising:
a connector block having a first end and a second end opposite from the first end;
a first connector member extending from the first end of the connector block and pivotally attached thereto, wherein the first connector member is adapted to be fastened to a first truss member;

a second connector member extending from the second end of the connector block and pivotally attached thereto, wherein the second connector member is adapted to be fastened to a second truss member;

whereby when the first connector is fastened to the first truss member and when the second connector is fastened to the second truss member, the first truss member can be folded reversely atop the second truss member by pivoting the first and second truss members about the respective pivotal mountings on the connector block and the connector block provides spacing for such folding to occur.

[c10] The connector subassembly of claim 9 wherein the first connector member and the second connector member are interconnected by an intermediate member.

[c11] The connector subassembly of claim 10 wherein the first connector member is hingedly connected to the intermediate member.

[c12] The connector subassembly of claim 11 wherein the second connector member is hingedly connected to the intermediate member.

[c13] The connector subassembly of claim 12 wherein the intermediate member is fastened to the connector block.

[c14] The connector subassembly of claim 13 wherein the

intermediate member comprises an integral interconnection with the connector block.

[c15] The connector subassembly of claim 14 wherein the connector block has a recessed portion adapted to receive a portion of the first truss member when the first truss member is positioned in a folded position with respect to the connector block.

[c16] The connector subassembly of claim 15 wherein the recessed portion comprises a chamfered portion.

[c17] The connector subassembly of claim 15 wherein the recessed portion comprises a notched portion.

[c18] The connector subassembly of claim 17 wherein the notched portion is rectangular.

[c19] The connector subassembly of claim 15 wherein the connector block has a recessed portion adapted to receive a portion of the second truss member when the second truss member is positioned in a folded position with respect to the connector block.

[c20] The connector subassembly of claim 19 wherein the recessed portion comprises a chamfered portion.

[c21] The connector subassembly of claim 19 wherein the recessed portion comprises a notched portion.

- [c22] The connector subassembly of claim 21 wherein the notched portion is rectangular.
- [c23] The connector subassembly of claim 19 wherein the connector block is made of wood.
- [c24] The connector subassembly of claim 9 wherein the first connector member is hingedly connected to the intermediate member.
- [c25] The connector subassembly of claim 9 wherein the second connector member is hingedly connected to the intermediate member.
- [c26] The connector subassembly of claim 25 wherein the intermediate member is fastened to the connector block.
- [c27] The connector subassembly of claim 26 wherein the intermediate member comprises an integral interconnection with the connector block.
- [c28] The connector subassembly of claim 9 wherein the connector block has a recessed portion adapted to receive a portion of the first truss member when the first truss member is positioned in a folded position with respect to the connector block.
- [c29] The connector subassembly of claim 28 wherein the recessed portion comprises a chamfered portion.

- [c30] The connector subassembly of claim 28 wherein the recessed portion comprises a notched portion.
- [c31] The connector subassembly of claim 30 wherein the notched portion is rectangular.
- [c32] The connector subassembly of claim 9 wherein the connector block has a recessed portion adapted to receive a portion of the second truss member when the second truss member is positioned in a folded position with respect to the connector block.
- [c33] The connector subassembly of claim 32 wherein the recessed portion comprises a chamfered portion.
- [c34] The connector subassembly of claim 32 wherein the recessed portion comprises a notched portion.
- [c35] The connector subassembly of claim 34 wherein the notched portion is rectangular.
- [c36] A truss comprising:
an array of interconnected truss members including a first truss member and a second truss member;
a pivotal interconnection between the first truss member and the second truss member comprising:
a connector block having a first end and a second end opposite from the first end;
a first connector member extending from the first end of the

connector block and pivotally mounted to the first truss member;

a second connector member extending from the second end of the connector block and pivotally mounted to the second truss member;

whereby the first truss member can be folded reversely atop the second truss member by pivoting the first and second truss members about the respective pivotal mountings on the connector block and the connector block provides spacing for such folding to occur.

[c37] The truss of claim 36 wherein the first truss member has an inner vertical surface and the connector member has an outer vertical surface, and wherein the inner vertical surface of the first connector member and the outer vertical surface of the connector member come into abutment when the first truss member is moved to a fully unfolded position with respect to the connector member.

[c38] The truss of claim 37 wherein the second truss member has an inner vertical surface and the connector member has an outer vertical surface, and wherein the inner vertical surface of the second connector member and the outer vertical surface of the connector member come into abutment when the second truss member is moved to a fully unfolded position with respect to the connector member.

- [c39] The truss of claim 38 wherein the connector block has a recessed portion adapted to receive a portion of the first truss member when the first truss member is positioned in a folded position with respect to the connector block.
- [c40] The truss of claim 39 wherein the recessed portion comprises a chamfered portion.
- [c41] The truss of claim 39 wherein the recessed portion comprises a notched portion.
- [c42] The truss of claim 41 wherein the notched portion is rectangular.
- [c43] The truss of claim 39 wherein the connector block has a recessed portion adapted to receive a portion of the second truss member when the second truss member is positioned in a folded position with respect to the connector block.
- [c44] The truss of claim 43 wherein the recessed portion comprises a chamfered portion.
- [c45] The truss of claim 43 wherein the recessed portion comprises a notched portion.
- [c46] The truss of claim 45 wherein the notched portion is rectangular.
- [c47] The truss of claim 43 wherein the truss comprises a monopitch truss.

- [c48] The truss of claim 43 wherein the truss comprises a double-wide truss.
- [c49] The truss of claim 43 wherein the truss comprises a triple-wide truss.
- [c50] The truss of claim 43 wherein the truss comprises a Cape Cod-style truss.
- [c51] The truss of claim 43 wherein the truss comprises a storage-type truss.
- [c52] The truss of claim 36 wherein the second truss member has an inner vertical surface and the connector member has an outer vertical surface, and wherein the inner vertical surface of the second connector member and the outer vertical surface of the connector member come into abutment when the second truss member is moved to a fully unfolded position with respect to the connector member.
- [c53] The truss of claim 36 wherein the connector block has a recessed portion adapted to receive a portion of the first truss member when the first truss member is positioned in a folded position with respect to the connector block.
- [c54] The truss of claim 53 wherein the recessed portion comprises a chamfered portion.
- [c55] The truss of claim 53 wherein the recessed portion comprises

a notched portion.

- [c56] The truss of claim 55 wherein the notched portion is rectangular.
- [c57] The truss of claim 36 wherein the connector block has a recessed portion adapted to receive a portion of the second truss member when the second truss member is positioned in a folded position with respect to the connector block.
- [c58] The truss of claim 57 wherein the recessed portion comprises a chamfered portion.
- [c59] The truss of claim 57 wherein the recessed portion comprises a notched portion.
- [c60] The truss of claim 59 wherein the notched portion is rectangular.
- [c61] The truss of claim 36 wherein the truss comprises a monopitch truss.
- [c62] The truss of claim 36 wherein the truss comprises a double-wide truss.
- [c63] The truss of claim 36 wherein the truss comprises a triple-wide truss.
- [c64] The truss of claim 36 wherein the truss comprises a Cape Cod-style truss.

- [c65] The truss of claim 36 wherein the truss comprises a storage-type truss.
- [c66] The truss of claim 36 wherein at least one of the first and second truss members is a chord.
- [c67] The truss of claim 36 wherein at least one of the first and second truss members is a kneewall.
- [c68] The truss of claim 36 wherein at least one of the first and second truss members forms an eave portion of the truss.
- [c69] The truss of claim 36 wherein at least one of the first and second truss members forms a peak portion of the truss.